Title (en)

METHOD OF MAKING A HIGH-PERFORMANCE SUPPORTED GAS SEPARATION MOLECULAR SIEVE MEMBRANE USING A SHORTENED CRYSTALLIZATION TIME

Title (de)

VERFAHREN ZUR HERSTELLUNG EINER HOCHLEISTUNGSFÄHIGEN GETRÄGERTEN GASTRENNUNGSMOLSIEBMEMBRAN UNTER VERWENDUNG EINER VERKÜRZTEN KRISTALLISATIONSZEIT

Title (fr)

PROCÉDÉ DE FABRICATION D'UNE MEMBRANE CHARGÉE DE TAMIS MOLÉCULAIRE DE SÉPARATION DE GAZ DE GRANDE EFFICACITÉ UTILISANT UNE PÉRIODE DE CRISTALLISATION RACCOURCIE

Publication

EP 2303439 A1 20110406 (EN)

Application

EP 09747646 A 20090515

Priority

- US 2009044063 W 20090515
- US 5346008 P 20080515
- US 9581408 P 20080910

Abstract (en)

[origin: WO2009140565A1] A method of making a supported gas separation molecular sieve membrane. In this method a porous support, which is preferably pretreated, is contacted with a molecular sieve synthesis mixture under hydrothermal synthesis conditions. The contacting step is conducted for a shortened crystallization time period. The resulting coated porous support is calcined to yield the supported gas separation molecular sieve membrane having particularly good gas separation characteristics.

IPC 8 full level

B01D 71/02 (2006.01); **B01D 53/22** (2006.01); **B01D 69/10** (2006.01); **B01J 37/02** (2006.01)

CPC (source: EP US)

B01D 53/22 (2013.01 - EP US); **B01D 53/228** (2013.01 - EP US); **B01D 63/06** (2013.01 - EP US); **B01D 67/0051** (2013.01 - EP US); **B01D 67/0083** (2013.01 - EP US); **B01D 69/105** (2013.01 - EP US); **B01D 71/0281** (2022.08 - EP US); B01D 2256/22 (2013.01 - EP US); B01D 2256/24 (2013.01 - EP US); B01D 2257/504 (2013.01 - EP US); B01D 2257/7022 (2013.01 - EP US); B01D 2323/12 (2013.01 - EP US); Y02C 20/40 (2020.08 - EP US)

Citation (examination)

- WO 2007134094 A2 20071122 - UNIV COLORADO REGENTS [US], et al
- WO 03040037 A1 20030515 - NORSK HYDRO AS [NO], et al
- See also references of WO 2009140565A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

WO 2009140565 A1 20091119; AU 2009246195 A1 20091119; AU 2009246195 B2 20140529; BR PI0912586 A2 20170620; BR PI0912586 A8 20171003; CA 2724351 A1 20091119; EA 201001786 A1 20110830; EP 2303439 A1 20110406; MY 160344 A 20170228; US 2010116130 A1 20100513; US 2011113958 A1 20110519; US 8685143 B2 20140401

DOCDB simple family (application)

US 2009044063 W 20090515; AU 2009246195 A 20090515; BR PI0912586 A 20090515; CA 2724351 A 20090515; EA 201001786 A 20090515; EP 09747646 A 20090515; MY PI2010004847 A 20090515; US 46656909 A 20090515; US 93679509 A 20090515